



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/522,876 | 02/02/2005 | Mitsuo Tashiro | FP3002-0036 | 5251 |

39083 7590 04/11/2008
CERMAK KENEALY & VAIDYA, LLP
515 EAST BRADDOCK RD SUITE B
Alexandria, VA 22314

| |
|----------|
| EXAMINER |
|----------|

GILBERT, ANDREW M

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3767

| | |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

04/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/522,876 | Applicant(s) TASHIRO, MITSUO | |
| | Examiner ANDREW M. GILBERT | Art Unit 3767 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-14,16,18-21,23 and 25-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-14,16,18-21,23 and 28 is/are rejected.
- 7) ☐ Claim(s) 25-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/21/2008 has been entered.

Acknowledgments

2. This office action is in response to the reply filed on 2/21/2008.
3. In the reply, the Applicant added new claims 25-28.
4. Thus, claims 1-7, 9-14, 16, 18-21, 23, 25-28 are pending for examination.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3, 12, 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Huber et al (5941847). Huber et al discloses a breast pump (Figs 1-3), comprising: a milk container main body (52) capable of accommodating sucked mother's milk; a deformable member (60) configured to provide a sealed space by contacting a breast; a horn member (16) disposed outside the deformable member; an internal space

pressure altering device (32, 84, 80) that is configured to alternately provide a negative pressure condition and an atmospheric pressure condition in the sealed space; and a communicating portion (82) configured to connect the internal space pressure altering device and the sealed space, wherein the horn member is configured such that it does not deform when internal pressure within the sealed space varies and has a base end disposed near the communicating portion, an inner surface, and an opening end disposed near an entrance through which the breast is inserted (Figs 1-3); the deformable member is configured to cover the inner surface of the horn member, to deform when internal pressure within the sealed space varies, and has an attachable and detachable portion which is attachable to and detachable from the horn member (Figs 1-3); the attachable and detachable portion has a base end side attachable and detachable portion configured to be fixed to the base end of the horn member and an opening side attachable and detachable portion configured to be fixed to the opening end of the horn member (Figs 1-3); the horn member has an atmospheric pressure condition creating structure (space between arms 22) configured to maintain an atmospheric pressure condition in a space between the deformable member and the horn member, wherein the atmospheric pressure condition creating structure is at least one vent opening (space between arms 22) formed by only the horn member so as to directly open the space between the deformable member and the horn member to atmosphere, and a first side of the at least one vent opening in the horn member is exposed directly to the space between the horn member and the deformable member, and an opposite side of the at least one vent opening in the horn member is exposed

directly to atmosphere exterior to the breast pump (Figs 1-3), and the atmospheric pressure condition creating structure is configured to maintain an atmospheric pressure condition in the space between the deformable member and the horn member continuously during operation of the internal space pressure altering device during both a time at which the negative pressure condition is present in the sealed space and a time at which the atmospheric pressure condition is present in the sealed space (Figs 1-3; col 2, lns 52-col 3, lns 67). In reference to claim 3 (see Figs 1-3); claim 12 (see 64; Figs 1-3; wherein any portion of the deforming member that deforms in a direction (ie inwardly towards breast due to suction pressure) is configured to regulate a deformation direction); claim 28, (see 22, 64; Figs 1-3). Also, see the discussion below in Response to Arguments.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 4-7, 9-11, 13, 14, 16, 18, 19-21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huber et al in view of Ford (5885246). Huber et al discloses the invention substantially as claimed except for expressly disclosing the deformable member has a stimulating convex projection inwardly disposed at a plurality of positions at least some being opposed to each other on a first virtual line, a

deformation guide portion having a thinner wall than a wall of the deformable member and being disposed on a second virtual line that crosses the first virtual line. Ford teaches that it is known to have the deformable member has a stimulating convex projection inwardly disposed at a plurality of positions (10a-e, 15, 16, 17; Fig 1, 4-9) at least some being opposed to each other on a first virtual line (10a-e, 15, 16, 17; Fig 1, 4-9), a deformation guide portion having a thinner wall (ie 10a-e, Fig 2) than a wall of the deformable member (ie 11, Fig 2) and being disposed on a second virtual line that crosses the first virtual line (10a-e, 15, 16, 17; Fig 1, 4-9; wherein some convex projections may be termed to be convex projections along a 1st virtual line while those opposite on a 2nd virtual line may be termed to be a deformation guide portion) for the purpose of massaging the areola region stimulating lactation of milk. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the deformable member as taught by Huber et al with the deformable member as taught by Ford for the purpose of massaging the areola region stimulating lactation of milk.

Response to Arguments

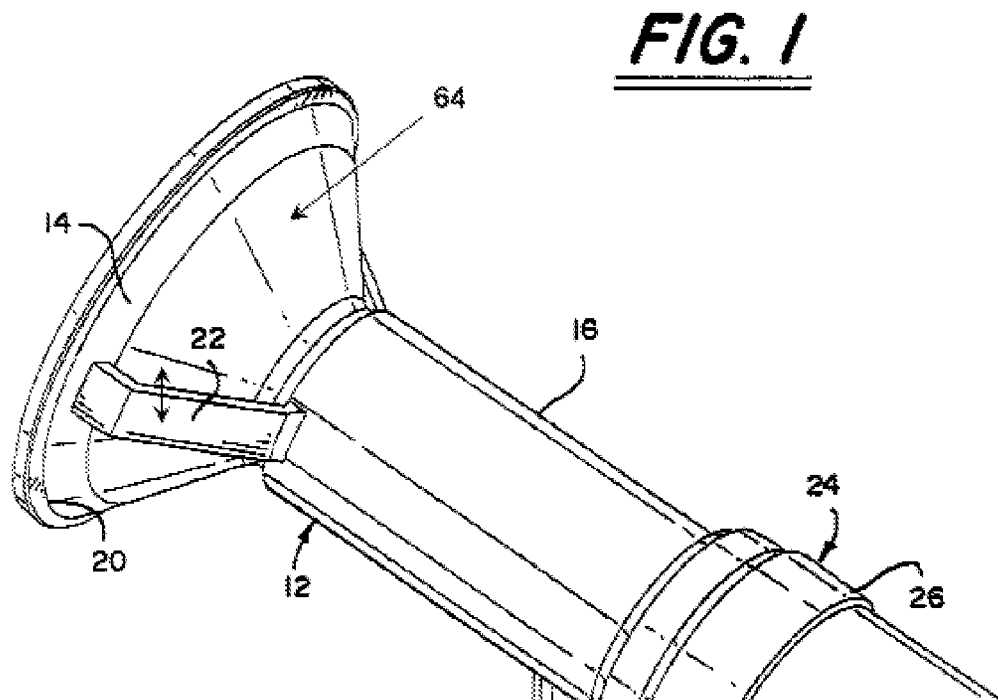
9. Applicant's arguments filed 2/21/2008 have been fully considered but they are not persuasive.

10. The Applicant argues that Huber '847 does not teach or suggest a space between the deformable member and the horn member.

11. In response to the Applicant's arguments, the Examiner notes that as shown in the annotated Figure 1 below, the arms of the horn member (22) are disposed over the

Art Unit: 3767

deformable member (60; at the surface area of 64). As indicated by the double arrow below, there is a space shown between the inner surface of the arms (22) and the outer surface of the deformable member (64). This space reads on the applicant's recitation of "a space between the deformable member and the horn member. Under application of negative pressure this space changes in volume as the outer surface of the deformable member (64) is deformed inwardly towards the breast under the force of the negative pressure. The inner surface of the arms (22) do not move because they are rigid – thus, a change in volume and spacing between the two elements occurs under negative pressure and returns to normal spacing upon release of negative pressure. The examiner further comments that the applicant has not in the independent claims provided structural recitations in the claims that describe the size, shape, or relative placement of the vent openings, size of the horn member relative to the deformable member, or size of the spacing between the horn member and the deformable member. Some aspects have been claimed in newly submitted claims 25-27 and the examiner recommends further detailing such aspects of the applicant's claim invention and incorporating the limitations into the independent claims to distinguish the applicant's claimed invention over the prior art of record.



Annotated Figure 1: Huber '847

Allowable Subject Matter

12. Claims 25-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW M. GILBERT whose telephone number is (571)272-7216. The examiner can normally be reached on 8:30 am to 5:00 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571)272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew M Gilbert/
Examiner, Art Unit 3767
/Kevin C. Sirmons/
Supervisory Patent Examiner, Art Unit 3767